

REMARKS

Claims 1-5, 21, 22, and 28-35 are pending in the present application. Claims 6-20 and 23-27 have previously been canceled. Claims 1, 21, and 32 are independent.

35 U.S.C. §102(e) Kobayashi Rejection

Claims 1-6, 21, 22 and 28-33 are rejected under 35 USC 102(e) as being anticipated by Kobayashi (USP 6,466,625). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

All previous arguments against Kobayashi are hereby incorporated by reference.

In response to those arguments, the Office Action points to column 15, lines 58-64 as well as step ST44 of Fig. 20 and step ST64 of Fig. 22, as teaching the claimed temporal conversion. The Examiner's response to Arguments Section also points to the third embodiment of Kobayashi including Figure 17. The rejection section also points to interpolation circuit 48 of Fig. 17 as well as column 14, lines 57-62.

It is respectfully submitted that the Examiner is misinterpreting the term "temporal conversion". As will be demonstrated below, Kobayashi clearly performs spatial filtering and has no disclosure or suggestion of temporal conversion. Further in summary, the claims have been amended to further clarify this distinction, as will also be argued in detail below.

Kobayashi discloses a pre-filter 23 that performs spatial filtering of the image data prior to encodation by the moving picture encoding circuit 24. The spatial filter 23 performs spatial filtering of various blocks in the image. This pre-filter 23 is consistently referred to as being a specific type of low-pass filter (see column 10, lines 49-52; column 13, lines 1-26; and column 15, lines 1-15).

In the Response to Arguments section of the Final Office Action, the Examiner argues that steps ST44 of Fig. 20 and ST64 of Fig. 22 teach the temporal conversion as claimed.

In response to these arguments, Applicants note that Kobayashi is merely using temporally-related information to determine the filter characteristics of spatial filter 23. In more detail and in reference to the same section (column 15, lines 43-67) cited by the Examiner, it is stated that the filter characteristics are based upon the filter characteristics used for temporally adjacent pictures. In other words, and as stated by Kobayashi in column 15, lines 50-57:

The calculated filtering characteristics are corrected, in consideration of the pre-filtering control information used in the small block at the spatially same position of the temporally adjacent picture, so that there occurs no subjective deterioration of the picture quality nor lowering of the efficiency of the inter-frame predictive coding, in order to determine pre-filtering characteristics with respect to the small blocks being encoded. (emphasis added)

In other words, the characteristics of the pre-filter 23 do indeed utilize or depend upon the filter characteristics in

temporally adjacent images or pictures, but the fact remains that the pre-filter 23 is performing spatial filtering. As noted above in the quoted section, the pre-filter 23 is consistently referred to as a low-pass filter. Furthermore, the operations performed by pre-filter 23 are with respect to a block of an image. Filtering image blocks within a single image is spatial filtering and in no sense performs temporal conversion. While it is true that the filter coefficients may be based on temporally-related pictures and the spatial filter coefficients utilized therein, the actual filtering performed is indeed spatial filtering and does not involve, disclose or suggest temporal conversion as claimed.

To emphasize these differences, each of the independent claims have been amended. For example, independent claim 1 now recites a picture conversion unit for temporally converting a picture format of the source picture data to reduce temporally-redundant information. The technology disclosed by Kobayashi simply does not reduce temporally-redundant information in the pre-filter step nor does it perform any type of temporal conversion. As argued above, and as supported by Kobayashi itself, the applied patent is solely limited to spatial filtering and has no disclosure or remote concept of temporal conversion particularly to reduce a temporally-redundant information as claimed.

Still further, Kobayashi fails to disclose or suggest a conversion controller for controlling the picture conversion unit based on the coding difficulty information to convert the picture

format using at least a temporal conversion. This additional concept is certainly not disclosed or suggested by Kobayashi.

Furthermore, independent claim 1 also recites a patentable method at least because Kobayashi fails to disclose or suggest temporally converting a picture data format based on coding difficulty information using at least temporal conversion to reduce temporally-redundant information. There is no such concept disclosed or suggested in Kobayashi as argued above in greater detail.

Still further, Kobayashi fails to disclose or suggest the method of claim 32. Particularly, the step of temporally converting a picture format of the source picture data, to reduce temporally-redundant information. Nor does Kobayashi disclose or suggest controlling the converting of the picture format based on the coding difficulty information using at least temporal conversion as further recited in independent claim 32.

Each of the dependent claims is considered patentable at least because of their respective dependency upon the independent claims 1, 21, and 32 which are particularly argued above. For the above reasons, taken alone or in combination, reconsideration and withdrawal of the Section 102(e) Kobayashi rejection is respectfully requested.

Conclusion

In view of the amendments and remarks submitted above, it is respectfully submitted that all of the remaining claims are

allowable and a Notice of Allowance is earnestly solicited.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayments to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

The Examiner is invited to contact the undersigned at (703) 205-8022 to discuss the application.

Respectfully submitted,

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